

Decorative Panels: avoiding production errors with new Hecht Electronic measuring tables

# TARGET PREPARATION

## With Precise Measuring Data

Complicated component geometrics, a large number of drill holes – anyone who wants to have their production under control with low error rates can't really do without a solid technical support. The English firm Decorative Panels recently invested in their third measuring table from Hecht Electronic in order to permanently monitor the components produced. They've been saving time ever since, continuously increasing the quality of their products, with the number of returns dropping as well.



Whether at home, at work or during your free time, there's a good chance you will come across a product from Decorative Panels: the English firm is one of Europe's leading suppliers of decorative wooden products, finished components and flat-pack furniture.

The origins of the West Yorkshire Decorative Panels Group date back to 1907. Nowadays, the lamination, components and furniture divisions are separate, but together they make up the Decorative Panels Group. These vertically integrated businesses are suppliers to prominent brands in the furniture and related industries. The business is constantly investing – particularly in the latest technology. With the recent commissioning of a new production site for ready-made panels, the firm now possesses over 52,000 square meters of production area. Total Quality Management is implemented throughout the entire group, bringing a philosophy of continuous improvement to bear on the entire supply chain. So their unusually high level of cus-

tomers satisfaction is permanently assured.

In order to further improve quality and productivity as well as to eliminate errors, the English manufacturer invested in 2011 in a Standard *DesQ* measuring table from the in Besigheim, southern Germany based firm, Hecht Electronic AG. The level of management satisfaction with the initial installation was demonstrated by their subsequent order in 2014 of two additional measuring tables, this time *OptoDesQ Vmax* models.

Phil Dalton, head of production at Decorative Panels Furniture Ltd., remains convinced to this day that this was the right decision: "The measuring tables measure the furniture components and drill holes with complete precision – this level of improvement in quality would be impossible using conventional methods." The detailed result report generated automatically after each measurement reveals even the smallest differences, invisible to the human eye. The report serves as the basis for subsequent optimisation of production settings for the drills.

Errors caused by incorrect measurement are a thing of the past.

The aim was also over and above this, according to Dalton, to reduce the downtime of the machines. "Previously, in order to avoid human error, the position, diameter and depth of each drill hole was checked separately by two operators. The measuring tables have dramatically reduced the time required for this process, especially for parts with many complicated drill holes and geometrics," he continues. The result: production can get going again much faster. The *OptoDesQ Vmax* also provides complete certainty that the component has been measured accurately – and this in just a minute or less. And on top of this, the operator can take on other tasks during the measurement process – just one more decisive factor.

The fully automatic *OptoDesQ Vmax* measuring tables are used for the contactless measurement of all geometric dimensions in industrial production. At the same time, the system sets new benchmarks for user-friendliness and

efficiency. Equipped with a camera and special image recognition software, it delivers highly accurate measurement results. Adjustments are made using highly dynamic servomotors. Software connections to various brands of drilling machine make it possible for data to be transferred directly and measuring programmes to be produced. In addition, data can be evaluated after measurement and compared with drilling spindle data. Using a summary, the operator is quickly able to recognise which spindle needs to be adjusted how.

Asked whether there were any particular project implementation challenges to overcome, Dalton remarked: "The greatest challenge was convincing the team to see the new measuring tables as a help rather than a hindrance and to accept them as part of the production process." In the past, operators were used to working with conventional measuring techniques and the switch to new technology was intimidating at first. "But the training given by the Hecht staff member was fantastic and the software

easy to understand and operate. Within two weeks, both measuring tables were in full use and our employees have come to treasure every aspect of the technology."

Special feature requests were unnecessary as the measuring tables provided all the functions identified in the requirements specification. With their comprehensive wealth of experience in the field of furniture production, Hecht measuring tables are superbly equipped for furniture industry applications. The customer benefits from this specialisation. Hecht is a complete supplier, able to offer the customer exactly the right product, from simple measuring stops and manual measuring tables to automatic measuring tables or inline measurement equipment. Precisely which solution makes the best sense financially depends on operational requirements.

The German firm's professionalism was also clear to the English

during the commissioning and the start-up phases. "Everything went exactly according to plan. Hecht's staff member was on-site for around a week for installation and operator training as well as providing on-site support at the machines during initial production. The relationship of trust that we have had over many years and have come to value so much once again proved fruitful in terms of the new machinery."

As is always the case when a new machine is installed, questions sometimes arise after the fact. But since the measuring table is directly connected to the Internet, issues can be immediately explained by Hecht technicians. This aftersales service is another valuable contribution towards protecting your investment.

The surface area of the various measuring tables is minimal which means that they do not take up

much space in the production area. Use of the tables has brought great advantages for Decorative Panels; the goal of substantially increasing the quality has of course also been achieved. Furthermore, they are now able to save preparation time because data evaluation enables faster precise machine adjustment, and return rates have been noticeably reduced.

Since the company was founded in 1971, Hecht Electronic AG has been setting new standards in quality assurance with each and every development. The company has a track record for bringing together electronics and mechanics, providing a range of solutions in processing precision through the interaction between these two fields. Customers from all over the world benefit from innovative systems, sophisticated both economically and technologically, and

make use of the experience and individual service offered by Hecht's highly competent employees. Through regular cooperation with research institutes both in Germany and abroad, Hecht has been able to incorporate valuable new ideas into their own research and development again and again.

At the *Ligna* trade fair in May 2015, Hecht will introduce a brand new double-sided scanner for production lines, with cameras above and beneath for drill hole measurement (diameter and position). Delegates from across the world will see for themselves how Hecht's intelligent solutions are always adapted to suit the customer's individual requirements. "This is the secret of our success," says Carina Hettich who, together with her husband Michael Hettich, has been running the family business in the second generation since 2013.

